



December 12, 2018

Reference No. 11185942

Doug Pollock, AICP
Village Administrator

cc. Evan Walter
Assistant to the Village Administrator

Administrative Services – Planning – Economic Development
Village of Burr Ridge
7660 County Line Road
Burr Ridge, IL 60527

Dear Mr. Pollock:

**Re: Summary of Ethylene Oxide Air Monitoring Assessment
Village of Burr Ridge**

This letter report summarizes the results of an air monitoring assessment performed by GHD Services, Inc. (GHD) for the Village of Burr Ridge, Illinois. The Village of Burr Ridge requested this air monitoring assessment in order to accomplish two main tasks, as laid out in our proposal, dated October 23, 2018:

Task 1 – Quantify Ethylene Oxide (EtO) concentrations from selected locations in outside ambient air within the Village of Burr Ridge and compare the air sampling data to the established community risk levels in order to determine risk for exposures for building occupants. Make public health hazard determination based on findings and otherwise provide guidance on the risk for occupancy.

Task 2 – Identify additional sources of EO emissions within the immediate areas around the Sterigenics Willowbrook facility. Determine the potential for exposures to ethylene oxide (EtO) from the Sterigenics Willowbrook facility.

GHD conducted an air sampling survey in the Village of Burr Ridge on November 13-14, 2018. The sampling program was designed to include outdoor spaces near public buildings, private residences, public parks, and schools. All samples were collected within the Village of Burr Ridge, and within a 2-mile radius of the Sterigenics Willowbrook facility, to evaluate this facility as a potential source of EtO.

The EtO levels identified through our monitoring program ranged from 5 to 10 times lower than those identified by the USEPA in May of 2018. We tested at multiple locations within the Village of Burr Ridge, including locations that were upwind of Sterigenics during the entire test. The test results from our monitoring confirm the presence of EtO throughout Burr Ridge, in samples both upwind and downwind of Sterigenics. The average of the results of the upwind outdoor samples was 0.1 ppb EtO. The average of the results of the downwind outdoor samples was 0.142 ppb. The sampling results indicate that EtO

is present in locations both upwind and downwind of Sterigenics above the risk-based levels used by the USEPA in their August 2018 report of 0.0001 ppb. The presence of EtO entering the Village of Burr Ridge from upwind of the Sterigenics facility indicates the possibility of other upwind sources of EtO, which may result from other urban activities, other sources of EtO such as hospitals and other sterilization processes, as well as other explanations not yet identified. Research and associated literature in this area is very limited. We recommend further investigation in both up- and downwind regions of the facility on multiple days. These efforts are currently being undertaken more extensively by the USEPA and the Village of Willowbrook.

1. Introduction

On November 13, 2018, GHD Consulting Services Inc. (GHD) conducted air sampling in the Village of Burr Ridge, Illinois to assess the potential community exposures of ethylene oxide (EtO) produced by the Willowbrook, Illinois Sterigenics facility. Air monitoring activities were conducted in accordance with the air monitoring plan prepared by GHD that incorporated the USEPA TO-15 testing method.

On-site field staff included a GHD Certified Industrial Hygienist (CIH) Project Manager with specific training on hazard evaluation (including air sampling and field data collection). All air sampling activities and field documentation were directed by the GHD Project Manager. All air sampling strategies were implemented and coordinated by a GHD Certified Industrial Hygienist (CIH).

2. Methodology

To determine the representative inhalation exposures for receptors, GHD collected area air samples for EtO at eight (8) outdoor locations within the Village of Burr Ridge. The area air samples were collected at breathing zone height (approximately 5 to 6 feet) in an effort to simulate representative inhalation exposures for potentially affected receptors in each area. GHD collected the area air samples near commercial and residential buildings and recreational areas in selected outdoor locations. Eight (8) SUMMA canisters (6-Liter) were employed and analyzed according to the US Environmental Protection Agency (USEPA) TO-15 testing method.

Area air samples were collected using evacuated SUMMA canisters with 24-hour metered flow regulators. All air samples were collected according to the USEPA Method TO-15 including the analysis for EtO. All samples were shipped under appropriate Chain of Custody (COC) procedures to SGS Galson Laboratory in East Syracuse, NY for analysis. Galson is accredited by the American Industrial Hygiene Association (AIHA) for the analysis of air samples. The laboratory results for the air samples were used to assess areas where ambient EtO levels are present in greater concentrations than those present in background locations.

3. Results

A GHD CIH took eight (8) outdoor SUMMA canister samples throughout the Village of Burr Ridge. A GPS map of these samples is provided in Attachment A to this report. Throughout the sampling period (approximately 0700 on 11/13/2018 to 0900 on 11/14/18), the wind was blowing predominantly from the West and the Northwest according to meteorological data retrieved from the Chicago DuPage Airport and

the Chicago Midway Airport. Attachment B provides these meteorological data in a Wind Rose plot, which shows the direction and speed *from which* the wind was blowing during the sampling period.

The sample results are presented in Table 3.1.

**Table 3.1 - Area Air Sampling Results for EtO – Village of Burr Ridge, Illinois
11/13/2018 to 11/14/2018**

Location ID	GHD Sample ID	Sample Location	Measured Airborne Concentration	
			µg/m ³	ppb
1	Air-11185492-11/13-1	S Madison Street and Norris Drive	0.20	0.11
2	Air-11185492-11/13-2	Commerce Street and International Street	0.22	0.12
3	Air-11185492-11/13-3	75 th Street and S Frontage Road	0.29	0.16
4	Air-11185492-11/13-4	County Line Road and 79 th Street	0.18	0.1
5	Air-11185492-11/13-5	Walredon Avenue (Beside Tennis Court)	0.20	0.11
6	Air-11185492-11/13-6	91 st Street and Palisades Road	0.22	0.12
7	Air-11185492-11/13-7	S Madison Street and 74 th Street	0.12	0.069
8	Air-11185492-11/13-8	S Madison Street and S Frontage Road	0.40	0.22

4. Discussion

The sampling results indicate that EtO is present in locations both upwind and downwind of the Sterigenics facility above the risk-based level used by the USEPA in their August 2018 report of 0.0001 ppb. The presence of EtO entering the Village of Burr Ridge from upwind of the Sterigenics facility indicates the possibility of other upwind sources of EtO, which may result from other urban activities, other sources of EtO such as hospitals and other sterilization processes, as well as other explanations not yet identified.

Based on the meteorological data, as well as on-site observations by the sampling team, three sample locations (Samples 1, 2, and 7 in Table 3.1) were upwind of the Sterigenics facility during the sampling period, while the five remaining sample locations were potentially downwind of the Sterigenics facility during the sampling period. The average of the upwind samples was 0.1 ppb EtO. The average downwind outdoor level was 0.142 ppb, which is higher than samples collected upwind of Sterigenics.

Hydrocarbon combustion is thought to be a potential source of EtO emissions, however, not enough information is available to quantify these emissions. A California study indicated a range from 0.016 ppb EtO in remote coastal locations, to 0.03 ppb EtO in the Los Angeles suburbs, to 0.8 ppb EtO in downtown Los Angeles.¹ Other studies have yielded similar results.

¹ California Environmental Protection Agency Air Resources Board. Research Note 93-6. November 1993.

5. Electronic Field Documentation and Reporting

Appropriate field documentation was collected including a daily activity log, sampling field forms, site observations, and other pertinent documentation. The daily activity logs consisted of observations and field notes taken throughout the day. The daily logs were recorded either in bound log books or on pre-printed daily log forms. GHD Field Staff utilized mobile data collection and data management tools for field data collection, archiving, and reporting. Mobile iPads were used during the project to increase the accuracy of the data collected and decrease the reporting time.

All sampling data and supporting documentation (including calibration logs) collected during this project were stored in a comprehensive on-Site electronic database. GHD used a custom database application that uploaded field data directly to a secure GHD server. GHD and approved users were granted access to view current and historical photographs and other supporting documentation collected in real time through a secure GHD website. GHD used mobile data collection and data management tools for field data collection, archiving and reporting.

6. Conclusion

The EtO levels identified through our monitoring program range from 5 to 10 times lower than those identified by the USEPA in May of 2018. We tested at multiple locations within the Village of Burr Ridge, including locations that were upwind of Sterigenics during the entire test. The test results from our monitoring confirm the presence of EtO throughout Burr Ridge, in samples upwind and downwind of Sterigenics. The average of the upwind samples was 0.1 ppb EtO. The average downwind outdoor level was 0.142 ppb. The sampling results indicate that EtO is present in locations both upwind and downwind of Sterigenics above the risk-based levels used by the USEPA in their August 2018 report of 0.0001 ppb.

The presence of EtO entering the Village of Burr Ridge from upwind of the Sterigenics facility indicates the possibility of other, upwind sources of EtO, which may result from other urban activities, other sources of EtO such as hospitals and other sterilization processes, as well as other explanations not yet identified. At this time, we do not know which of these explanations is correct; as such, we recommend further investigation in both up- and downwind regions of the facility on multiple days. These efforts are currently being undertaken more extensively by the USEPA and the Village of Willowbrook. Research and associated literature in this area is very limited.

7. Quality Assurance/Quality Control and Reporting

All sampling records were reviewed to ensure accuracy and completeness. The sampling information for each sample was uploaded into an electronic database and each record was subjected to a Quality Assurance/Quality Control (QA/QC) review. All project related records and documents were reviewed to ensure accuracy and completeness and will be archived in GHD's Laserfiche system upon completion of the project. All data contained in the final report has been reviewed by a GHD CIH and is considered final. This report and supporting documentation was prepared and reviewed according to GHD's ISO 9001 quality review process. The air monitoring and sampling activities were performed under the direction of a GHD CIH and all air monitoring and sampling data were reviewed by a GHD CIH.

If you have any questions, please contact GHD at (501) 224-1926.

Respectfully Submitted,

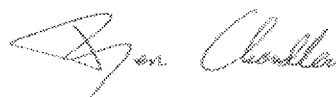
GHD Services, Inc.

This report was prepared by:



Dyron Hamlin, MS, PE, CIH

This report was reviewed by:



Benjamin Chandler, MS, CIH, CSP

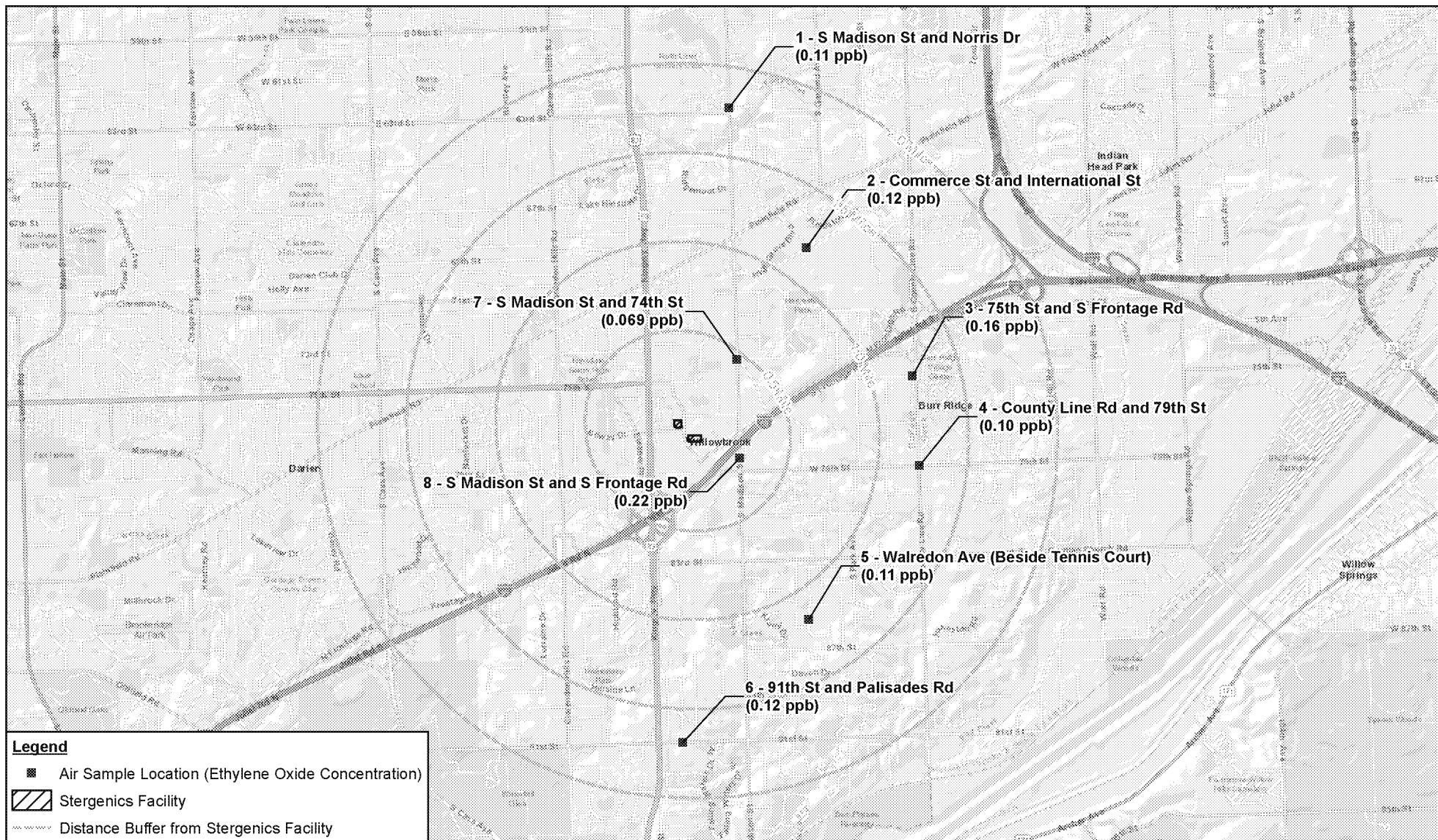
This report was reviewed by:



Kevin Kearney, MS, ASP

Attachment A

Air Sampling Map



Source: ESRI World Street Map, Esri, DeLorme, HERE, USGS, Intermap, IPC, NRCAN, Esri Japan, METI, Tomtom

0 0.5 1
Miles
Coordinate System:
NAD 1983 StatePlane Illinois East
FIPS 1201 Feet



VILLAGE OF BURR RIDGE, ILLINOIS

AREA AIR SAMPLING LOCATIONS

11185942
Nov 28, 2018

FIGURE 1

Attachment B

Wind Rose Plots

WIND ROSE PLOT:

Chicago Midway Airport 11/13/2018, 0700 - 11/14/2018, 0900

DISPLAY:

Wind Speed
Direction (blowing from)

COMMENTS:

Low Pressure system centered over western New York brought WNW winds to the Chicago area. Mostly clear skies and zero precipitation reported.

DATA PERIOD:

Start Date: 11/13/2018 - 00:00
End Date: 11/14/2018 - 09:00

TOTAL COUNT:

26 hrs.

CALM WINDS:

0.00%

AVG. WIND SPEED:

6.83 Knots

COMPANY NAME:

GHD

MODELER:

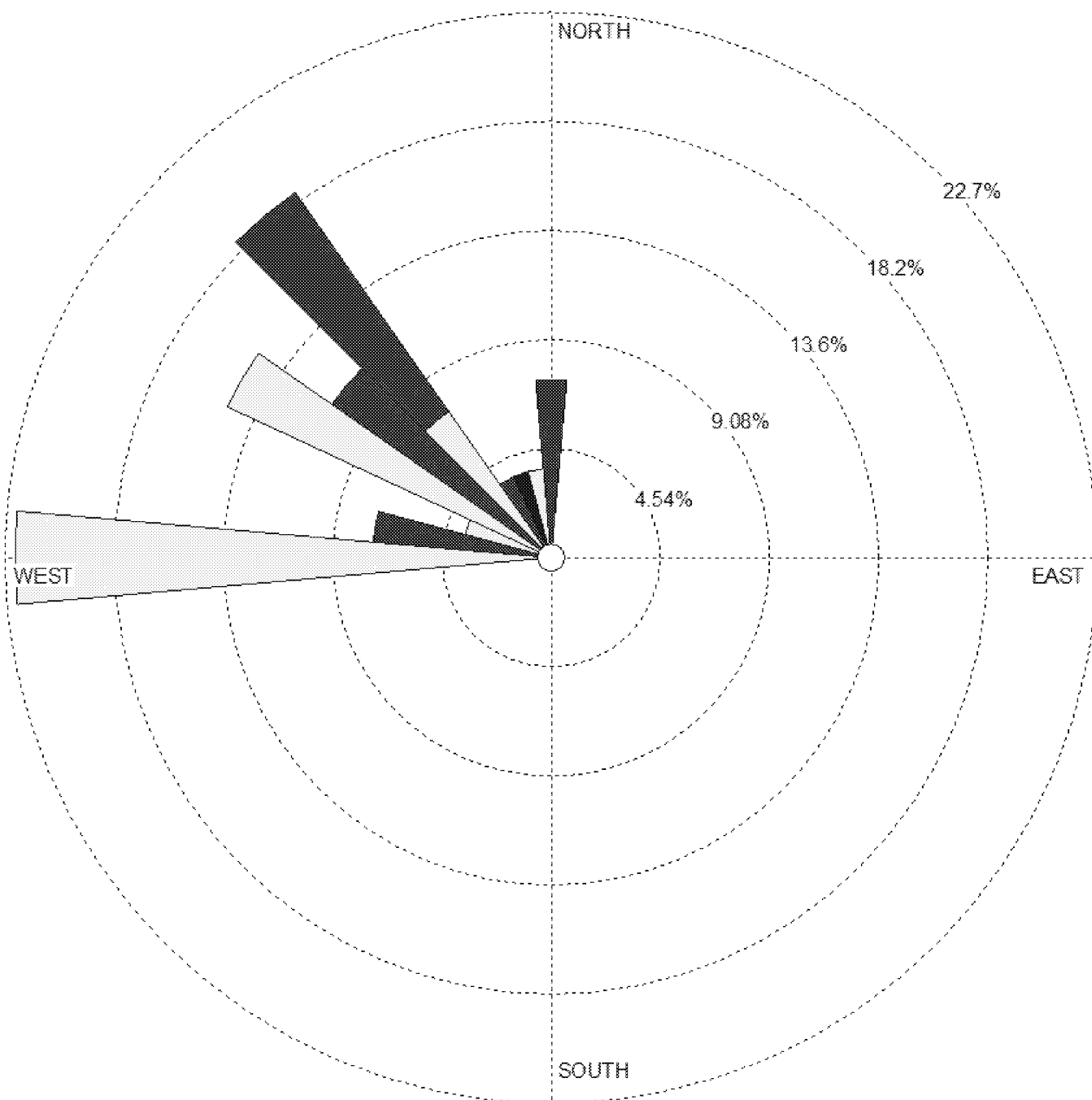
Tom Ashcraft

DATE:

12/10/2018

PROJECT NO.:

11183332



WIND ROSE PLOT:

Chicago DuPage Airport 11/13/2018, 0700 - 11/14/2018, 0900

DISPLAY:

Wind Speed
Direction (blowing from)

COMMENTS:

Low pressure system centered over western New York bringing WNW winds to the Chicago area. Mostly clear skies and zero precipitation reported.

DATA PERIOD:

Start Date: 11/13/2018 - 00:00
End Date: 11/14/2018 - 09:00

TOTAL COUNT:

26 hrs.

CALM WINDS:

22.22%

AVG. WIND SPEED:

3.03 m/s

COMPANY NAME:

GHD

MODELER:

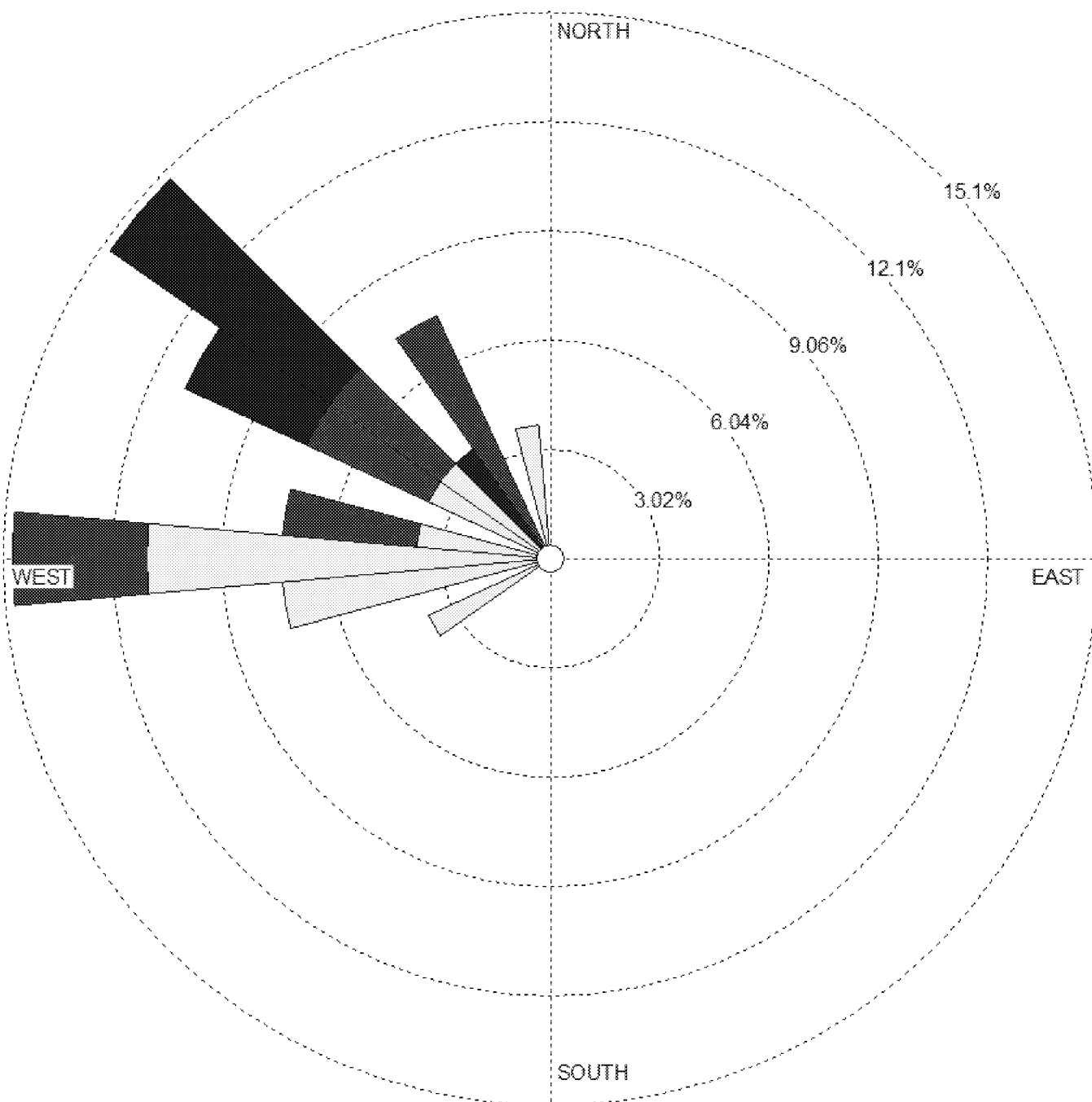
Tom Ashcraft

DATE:

12/10/2018

PROJECT NO.:

11183332

WIND SPEED
(m/s)

>= 11.10
8.80 - 11.10
5.70 - 8.80
3.60 - 5.70
2.10 - 3.60
0.50 - 2.10

Calms: 22.22%

Attachment C Laboratory Report



GALSON

**Mr. Ben Chandler
GHD Services Inc.
11719 Hinson Road
Suite 100
Little Rock, AR 72212**

November 26, 2018

**DOH ELAP #11626
AIHA-LAP #100324**

Account# 29016

Login# L463146

Dear Mr. Chandler:

Enclosed are the analytical results for the samples received by our laboratory on November 15, 2018. All test results meet the quality control requirements of AIHA-LAP and NELAC unless otherwise stated in this report. All samples on the chain of custody were received in good condition unless otherwise noted.

Results in this report are based on the sampling data provided by the client and refer only to the samples as they were received at the laboratory. When possible, non-IOM samples will be retained for 14 days following the date of this report (unless an extension is specifically requested). IOM samples are retained for 7 days.

Current Scopes of Accreditation can be viewed at www.sgsgalson.com in the accreditations section of the "About" page.

Please contact Charlene Moser at (888) 432-5227, if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

**Lisa Swab
Laboratory Director**

Enclosure(s)



GALSON

LABORATORY ANALYSIS REPORT

LELAP Lab ID #04083

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client : GHD Services Inc.
Site : Village of Burr Ridge
Project No. : M85942

Date Sampled : 13-NOV-18
Date Received : 15-NOV-18
Date Analyzed : 26-NOV-18
Report ID : 1104455

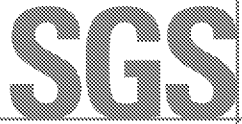
Account No.: 29016
Login No. : L463146
Units : ppbv

Galson ID: LOQ L463146-1 L463146-2 L463146-3
Client ID: ppbv AIR-11185492-11/13-1 AIR-11185492-11/13-2 AIR-11185492-11/13-3

Ethylene oxide	0.040	0.11	0.12	0.16
----------------	-------	------	------	------

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS	QC by : SAP	Supervisor: SAP
Collection Media : 6L Summa	Approved by : SAP	
Submitted by : DJW	Date : 26-NOV-18	NYS DOH # : 11626

< -Less Than mg -Milligrams m3 -Cubic Meters ppbv-Parts per Billion Volume NS -Not Specified L -Liters
> -Greater Than ug -Micrograms ND -Not Detected ppmv-Parts per Million Volume LOQ -Limit of Quantitation NA -Not Applicable



GALSON

LABORATORY ANALYSIS REPORT

LELAP Lab ID #04083

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Date Received : 15-NOV-18
Date Analyzed : 26-NOV-18
Report ID : 1104455

Account No.: 29016
Login No. : L463146
Units : ppbv

Galson ID:	LOQ	L463146-4	L463146-5	L463146-6
Client ID:	ppbv	AIR-11185492-11/13-4	AIR-11185492-11/13-5	AIR-11185492-11/13-6

Ethylene oxide	0.040	0.10	0.11	0.12
----------------	-------	------	------	------

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS	QC by : SAP	Supervisor: SAP
Collection Media : 6L Summa	Approved by : SAP	
Submitted by : DJW	Date : 26-NOV-18	NYS DOH # : 11626

< -Less Than mg -Milligrams m3 -Cubic Meters ppbv-Parts per Billion Volume NS -Not Specified L -Liters
> -Greater Than ug -Micrograms ND -Not Detected ppmv-Parts per Million Volume LOQ -Limit of Quantitation NA -Not Applicable



GALSON

LABORATORY ANALYSIS REPORT

LELAP Lab ID #04083

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client : GHD Services Inc.
Site : Village of Burr Ridge
Project No. : M85942

Date Sampled : 13-NOV-18
Date Received : 15-NOV-18
Date Analyzed : 26-NOV-18
Report ID : 1104455

Account No.: 29016
Login No. : L463146
Units : ppbv

Galson ID: LOQ L463146-7 L463146-8
Client ID: ppbv AIR-11185492-11/13-7 AIR-11185492-11/13-8

Ethylene oxide	0.040	0.069	0.22
----------------	-------	-------	------

Analytical Method: mod. OSHA PV2120/mod. EPA TO15; GC/MS	QC by : SAP	Supervisor: SAP
Collection Media : 6L Summa	Approved by : SAP	
Submitted by : DJW	Date : 26-NOV-18	NYS DOH # : 11626

< -Less Than mg -Milligrams m3 -Cubic Meters ppbv-Parts per Billion Volume NS -Not Specified L -Liters
> -Greater Than ug -Micrograms ND -Not Detected ppmv-Parts per Million Volume LOQ -Limit of Quantitation NA -Not Applicable



GALSON

LABORATORY FOOTNOTE REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client Name : GHD Services Inc.
Site : Village of Burr Ridge
Project No. : M85942

Date Sampled : 13-NOV-18
Date Received: 15-NOV-18
Date Analyzed: 26-NOV-18

Account No.: 29016
Login No. : L463146

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Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise noted below, all quality control results associated with the samples were within established control limits or did not impact reported results.

Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com

Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceeding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

Unless otherwise noted below, reported results have not been blank corrected for any field blank or method blank.

L463146 (Report ID: 1104455):
SOPs: in-vocs(35)

L463146-2 (Report ID: 1104455):
Sample canister was received at/near ambient pressure.

<	-Less Than	mg -Milligrams	m3 -Cubic Meters	kg -Kilograms	ppm -Parts per Million	
>	-Greater Than	ug -Micrograms	l -Liters	NS -Not Specified	ND -Not Detected	NA -Not Applicable



GALSON

LABORATORY FOOTNOTE REPORT

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client Name : GHD Services Inc.
Site : Village of Burr Ridge
Project No. : M85942

Date Sampled : 13-NOV-18
Date Received: 15-NOV-18
Date Analyzed: 26-NOV-18

Account No.: 29016
Login No. : L463146

L463146 (Report ID: 1104455):

Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Ethylene oxide	N/A	N/A

< -Less Than	mg -Milligrams	m3 -Cubic Meters	kg -Kilograms	ppm -Parts per Million	
> -Greater Than	ug -Micrograms	l -Liters	NS -Not Specified	ND -Not Detected	NA -Not Applicable

783770563330
Date: 11/15/18
Shipper: FEDEX
Initials: BMC



Prep: UNKNOWN

tel: (315) 432-5227
888-432-LABS (5227)

www.sgsgalson.com

☐ New Client?

Report To:

Ben Chandler / Dyron Hamlin
1314 Hinson Road
Suite 100
Little Rock, AR 72212

Client Account No.:

Phone No.:

Cell No.:

Email Results to:

Email address:

501-224-1426
501-366-3999
benjamin.chandler@ghd.com
dyron.hamlin@ghd.com

Invoice To:

Art Greeley

Phone No.:

Email:

P.O. No.:

Credit Card:

☐ Card on File

☐ Call for Credit Card Info.

☐ Samples submitted using the FreePumpLoan™ Program

☐ Samples submitted using the FreeSamplingBadges™ Program

Need Results By:	(surcharge)
<input checked="" type="checkbox"/> Standard	0%
<input type="checkbox"/> 4 Business Days	35%
<input type="checkbox"/> 3 Business Days	50%
<input type="checkbox"/> 2 Business Days	75%
<input type="checkbox"/> Next Day by 6pm	100%
<input type="checkbox"/> Next Day by Noon	150%
<input type="checkbox"/> Same Day	200%

Site Name:

Village of Burr Ridge

Project:

M85942

Sampled by: Ben Chandler

Comments:

List description of Industry or Process/interferences present in sampling area:

State samples were collected in (e.g., NY)

IL

Please indicate which OEL this data will be used for:

☐ OSHA PEL

☐ ACGIH TLV

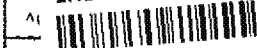
☐ Cal OSHA

☐ MSHA

☒ Other (specify):

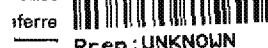
Sample Identification* (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units* L, ml, min, in2, cm2, ft2	Analysis Requested*	Method Reference*	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
AIR-11185492-11/13/2018-001	11/13/18	Summa	6 L		Ethylene Oxide	TO-15	
AIR-11185492-11/13/2018-002	11/13/18	Summa	6 L		Ethylene Oxide	TO-15	
AIR-11185492-11/13/2018-003	11/13/18	Summa	6 L		Ethylene Oxide	TO-15	
AIR-11185492-11/13/2018-004	11/13/18	Summa	6 L		Ethylene Oxide	TO-15	
AIR-11185492-11/13/2018-005	11/13/18	Summa	6 L		Ethylene Oxide	TO-15	
AIR-11185492-11/13/2018-006	11/13/18	Summa	6 L		Ethylene Oxide	TO-15	
AIR-11185492-11/13/2018-007	11/13/18	Summa	6 L		Ethylene Oxide	TO-15	
AIR-11185492-11/13/2018-008	11/13/18	Summa	6 L		Ethylene Oxide	TO-15	

783770563319
Date: 11/15/18
Shipper: FEDEX
Initials: BMC



Prep: UNKNOWN

783770563320
Date: 11/15/18
Shipper: FEDEX
Initials: BMC



Prep: UNKNOWN

the COC unless this box is checked: ☐ Use method(s) listed on COC

is required (only available for certain analytes - see SAG):

Chain of Custody	Print Name/Signature	Date	Time	Print Name/Signature	Date	Time
Relinquished by:	Greg Wesley	11/14/18	1000	Received by:	Brian Caruso	11/15/18 1227
Relinquished by:				Received by:		

Samples received after 3pm will be considered as next day's business

* Required fields, failure to complete these fields may result in a delay in your samples being processed.

Page 1 of 1

Attachment C

Electronic Sample Collection Information

Village of Burr Ridge, IL Ethylene Oxide Assessment Integrated Air Samples

Ethylene Oxide

11185492

New
Sample

Previous
Sample

Next
Sample

Sample ID: Air-11185492-11/13/2018-001

Personnel: Ben Chandler

Sample Location: Station1

Pump ID: 10679

Sample Start Time: 11/13/2018

Sample Stop Time: 11/14/2018

Sample Period: 1360.78333 Minutes

Regulator ID: 10132

Sample Comments:

Galson ID:

Canister-WL029

Regulator-WR838

Auto-Entered Information:

Sample Date: 11/13/2018

Sample Time: 9:09:35 AM

Latitude: 41.775117

Longitude: -87.935507

Flow Rate Calculations:

Initial Gauge Pressure 27 In Hg

Final Pressure 8 In Hg

Sample Volume 6 Liters

Sample Photo (Optional):



Village of Burr Ridge, IL Ethylene Oxide Assessment Integrated Air Samples

Ethylene Oxide

11185492

New
Sample

Previous
Sample

Next
Sample

Sample ID: Air-11185492-11/13/2018-002

Personnel: Ben Chandler

Sample Location: Station 2

Pump ID: 177

Sample Start Time: 11/13/2018

Sample Stop Time: 11/14/2018

Sample Period: 1355.4 Minutes

Regulator ID: 10148

Sample Comments:

Galson ID:

Canister-WL179
Regulator-WR842

Auto-Entered Information:

Sample Date: 11/13/2018

Sample Time: 9:25:17 AM

Latitude: 41.763678

Longitude: -87.926196

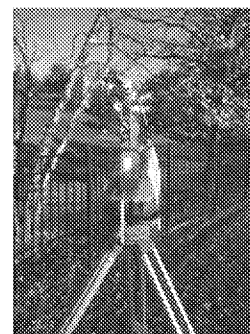
Flow Rate Calculations:

Initial Gauge Pressure 19 In Hg

Final Pressure 0 In Hg

Sample Volume 6 Liters

Sample Photo (Optional):



Village of Burr Ridge, IL Ethylene Oxide Assessment Integrated Air Samples

Ethylene Oxide

11185492

New
Sample

Previous
Sample

Next
Sample

Sample ID: Air-11185492-11/13/2018-003

Personnel: Ben Chandler

Sample Location: Station 3

Pump ID: 208

Sample Start Time: 11/13/2018

Sample Stop Time: 11/14/2018

Sample Period: 1350.33333 Minutes

Regulator ID: 10143

Sample Comments:

Galson ID:

Canister-WL216
Regulator-WR840

Auto-Entered Information:

Sample Date: 11/13/2018

Sample Time: 9:42:58 AM

Latitude: 41.754239

Longitude: -87.920597

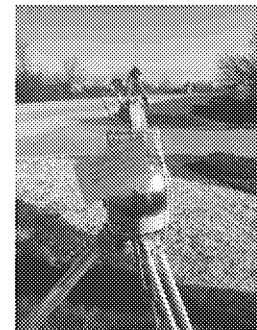
Flow Rate Calculations:

Initial Gauge Pressure 30 In Hg

Final Pressure 9 In Hg

Sample Volume 6 Liters

Sample Photo (Optional):



ED_002475_00000084-00022

Village of Burr Ridge, IL Ethylene Oxide Assessment Integrated Air Samples

Ethylene Oxide

11185492

New
Sample

Previous
Sample

Next
Sample

Sample ID: Air-11185492-11/13/2018-004

Personnel: Ben Chandler

Sample Location: Station 4

Pump ID: 10659

Sample Start Time: 11/13/2018

Sample Stop Time: 11/14/2018

Sample Period: 1345.21667 Minutes

Regulator ID: 06394

Sample Comments:

Galson ID:

Canister-WL061
Regulator-WR817

Auto-Entered Information:

Sample Date: 11/13/2018

Sample Time: 9:55:48 AM

Latitude: 41.745161

Longitude: -87.915583

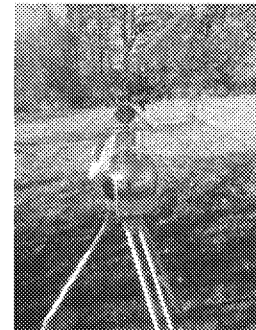
Flow Rate Calculations:

Initial Gauge Pressure 28 In Hg

Final Pressure 8 In Hg

Sample Volume 6 Liters

Sample Photo (Optional):



Village of Burr Ridge, IL Ethylene Oxide Assessment Integrated Air Samples

Ethylene Oxide

11185492

New
Sample

Previous
Sample

Next
Sample

Sample ID: Air-11185492-11/13/2018-005

Personnel: Ben Chandler

Sample Location: Station 5

Pump ID: 10637

Sample Start Time: 11/13/2018

Sample Stop Time: 11/14/2018

Sample Period: 1341.3 Minutes

Regulator ID: 10159

Sample Comments:

Galson ID:

Canister-WL086
Regulator-WR849

Auto-Entered Information:

Sample Date: 11/13/2018

Sample Time: 10:07:25 AM

Latitude: 41.733573

Longitude: -87.927323

Flow Rate Calculations:

Initial Gauge Pressure 28 In Hg

Final Pressure 9 In Hg

Sample Volume 6 Liters

Sample Photo (Optional):



Village of Burr Ridge, IL Ethylene Oxide Assessment Integrated Air Samples

Ethylene Oxide

11185492

New
Sample

Previous
Sample

Next
Sample

Sample ID: Air-11185492-11/13/2018-006

Personnel: Ben Chandler

Sample Location: Station 6

Pump ID: 156

Sample Start Time: 11/13/2018

Sample Stop Time: 11/14/2018

Sample Period: 1337.83333 Minutes

Regulator ID: 10152

Sample Comments:

Galson ID:

Canister-WL156

Regulator-WR857

Auto-Entered Information:

Sample Date: 11/13/2018

Sample Time: 10:19:51 AM

Latitude: 41.723300

Longitude: -87.940544

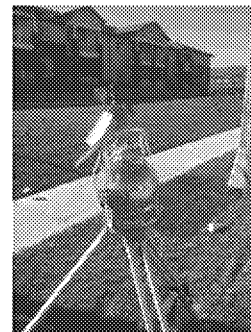
Flow Rate Calculations:

Initial Gauge Pressure 28 In Hg

Final Pressure 9 In Hg

Sample Volume 6 Liters

Sample Photo (Optional):



ED_002475_00000084-00025

Village of Burr Ridge, IL Ethylene Oxide Assessment Integrated Air Samples

Ethylene Oxide

11185492

New
Sample

Previous
Sample

Next
Sample

Sample ID: Air-11185492-11/13/2018-007

Personnel: Ben Chandler

Sample Location: Station 7

Pump ID: 10701

Sample Start Time: 11/13/2018

Sample Stop Time: 11/14/2018

Sample Period: 1336.38333 Minutes

Regulator ID: 06402

Sample Comments:

Galson ID:

Canister-WL049
Regulator-WR815

Auto-Entered Information:

Sample Date: 11/13/2018

Sample Time: 10:33:38 AM

Latitude: 41.754572

Longitude: -87.934598

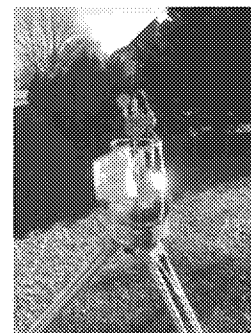
Flow Rate Calculations:

Initial Gauge Pressure 30 In Hg

Final Pressure 11 In Hg

Sample Volume 6 Liters

Sample Photo (Optional):



Village of Burr Ridge, IL Ethylene Oxide Assessment Integrated Air Samples

Ethylene Oxide

11185492

New
Sample

Previous
Sample

Next
Sample

Sample ID: Air-11185492-11/13/2018-008

Personnel: Ben Chandler

Sample Location: Station 8

Pump ID: 10518

Sample Start Time: 11/13/2018

Sample Stop Time: 11/14/2018

Sample Period: 1336.81667 Minutes

Regulator ID: 10135

Sample Comments:

Galson ID:

Canister-WL101
Regulator-WR831

Auto-Entered Information:

Sample Date: 11/13/2018

Sample Time: 10:42:31 AM

Latitude: 41.746154

Longitude: -87.934615

Flow Rate Calculations:

Initial Gauge Pressure 30 In Hg

Final Pressure 10 In Hg

Sample Volume 6 Liters

Sample Photo (Optional):

